JRC Mission
As the science and knowledge service of the European Commission, the Joint Research Centre’s mission is to support EU policies with independent evidence throughout the whole policy cycle.
Big Data and Economic Forecasting Workshop

1st day: 16 May 2019 (Building 36b, Room 2)

08:30-09:00 Coffee

09:00-09:15 Welcome remarks by Vladimir Šucha, Director-General of the Joint Research Centre

09:15-10:00 Raffaella Giacomini (University College of London)
Micro-forecasting Income Processes
Chair: Francesca Campolongo, JRC

10:00-11:15 Session 1: Big Data
Chair: Luca Barbaglia, JRC

Jeff Chen (Bureau of Economic Analysis)
Off to the Races: A Comparison of Machine Learning and Alternative Data for Predicting Economic Indicators

Marco Pangallo (University of Oxford)
The Potential of Big Housing Data: an Application to the Italian Real-Estate Market

Jesús Sanchez (Banco de España)
Nowcasting Private Consumption: Traditional Indicators, Uncertainty Measures, Credit Cards and Some Internet Data

11:15-11:30 Coffee break

11:30-13:10 Session 2: Big Models
Chair: Elisa Tosetti, JRC

Ines Wilms (Maastricht University)
High Dimensional Forecasting via Interpretable Vector Autoregression

Paolo Fornaro (Research institute of the Finnish Economy)
Nowcasting Finnish Real Economic Activity: A Machine Learning Approach

Maxime Leroux (Université du Québec à Montréal)
How is Machine Learning Useful for Macroeconomic Forecasting?

Dimitris Korobilis (University of Essex)
High-Dimensional Macroeconomic Forecasting Using Message Passing Algorithms

13:10-14:20 Lunch (Saletta)

JRC Ispra, 16-17 May 2019

14:20-16:00 Session 3: Text Analysis
Chair: Sergio Consoli, JRC

Eleni Kalamara (King’s College London)
Making Text Count: What Newspaper Can Tell Us About the Economy

Sam Borms (Université de Neuchâtel)
The Sentometrics Approach for Textual Sentiment based Prediction

Andres Azqueta (European Central Bank)
Economic Policy Uncertainty in Europe

Vegard Larsen (Norges Bank)
Business Cycle Narratives

16:00-16:30 Coffee break

16:30-17:15 Eric Ghysels (University of North Carolina at Chapel Hill)
Machine Learning with Mixed Frequency Data
Chair: Marco Ratto, JRC

17:30-19.00 Reception & Poster Session
(Centre for Advanced Studies, Building 46i)
Remarks by Jutta Thielen-del Pozo, JRC

19.30-21.30 Social Dinner at Ristorante Belvedere (Ranco)

2nd day: 17 May 2019 (Building 36b, Room 2)

08:30-09:00 Coffee

09:00-10:40 Session 4: Expectations and Uncertainty
Chair: Luca Tiozzo Pezzoli, JRC

Tatevik Sekphosyan (Texas A&M University)
Monetary Policy Uncertainty: A Tale of Two Tails

Javier Perez (Banco de España)
A New Economic Policy Uncertainty Index for Spain

Gergely Gánics (Banco de España)
BVAR Forecasts, Survey Information and Structural Change in the Euro Area

Simone Manganelli (European Central Bank)
Selecting Models with Judgment
Big Data and Economic Forecasting Workshop

10:40-11:10 Coffee break

11:10-13:00 Session 5: Networks and Factor Models in Finance
Chair: Elisa Ossola, JRC

Tiziano Squartini (IMT Lucca)
Detecting Mesoscale Network Structures

Alberto Caruso (Centro Studi Confindustria)
Predicting Interest Rates in Real-Time

Mirco Rubin (University of Bristol)
Comovement Changes between Stocks and Bonds: Evidence from a New Class of Large Dimensional Threshold Group-Factor Models

Fabio Trojani (University of Genève and Swiss Finance Institute)
Smart-SDFs

13:00-14:10 Lunch (Saletta)

14:10-15:50 Session 6: Big Models
Chair: Lucia Alessi, JRC

Andreas Joseph (Bank of England)
Shapley Regressions - a Framework for Statistical Inference on Machine Learning Models

Alessandro Barbarino (Federal Reserve Board)
Near-equivalence in Forecasting Accuracy of Linear Dimension Reduction Methods in Large Panels of Macro-variables

Michele Lenza (European Central Bank)
Economic Predictions with Big Data: the Illusion of Sparsity

David Kelley (Chicago Fed)
On the Network Origins of Approximate Factor Models

15:50-16:15 Coffee break

16:15-17:00 Barbara Rossi (Universitat Pompeu Fabra)
The Effects of Conventional and Unconventional Monetary Policy: A New Approach
Chair: Sebastiano Manzan, JRC

JRC Ispra, 16-17 May 2019

Poster Presentations

Yiru Wang
Universitat Pompeu Fabra
Detecting Density Forecast Breakdowns

Sathya Mellina
Loughborough University
Conventional and Unconventional Monetary Policy Shocks on Private Inflation Expectations

Elisa Tosetti
JRC
Regional Variation in Household Debt and Its Impact on Economic Growth: the case of Europe

Cem Çalımkol
Koç University
Modeling of Economic and Financial Conditions for Nowcasting and Forecasting Recessions: A Unified Approach

Francesca Lenoci
European Central Bank
Identifying counterparties’ sector under EMIR reporting

Emiliano Marchese
IMT Lucca
Early-warning signals of collapse in financial networks

Armando Rungi
IMT Lucca
Machine Learning for Zombie Hunting, Firms’ Financial Constraints, Productivity, and Misallocation

Elisa Ossola
JRC
A Diagnostic Criterion for Approximate Factor Structure

Simone Passeri
Prometeia
An Early Warning System for banking crises: From regression-based analysis to machine learning techniques

Dominik Hirschbühl
European Central Bank
Applying Granger Causality Networks and Machine Learning To Predict the Business Cycle

Thomas Dierckx
KU Leuven
Using Machine Learning and Alternative Data to Predict Movements in Market Risk

Luca Barbaglia
JRC
Loan Default Analysis in Europe Tracking Regional Variations Using Big Data

Luca Alfieri
University of Tartu
Forecasting industrial production with boosting in a Big “Fat” Dataset

Benedikt Maas
University of Hamburg
Nowcasting US GDP with artificial neural networks

Francesco Gullo
Unicredit
PIG: A Complete NLP Pipeline for Automatic Processing of Garnishment Documents

Luca Tiozzo Pezzioli
JRC
Big Data Financial Sentiment Analysis in the European Bond Markets

Sergio Consoli
JRC
Monitoring the business cycle with news

Laura Rossetti
Vrije Universiteit Brussels
Synchronization of Multi-Lingual News Data for Econometric Applications

Michele Catalanlo
Prometeia
The Prometeia’s Uncertainty index for Italy

Zexi Sun
Goethe University
Vague Talk in ECB Press Conference: News or Noise?
Map of the Joint Research Centre in Ispra

- Reception and poster session
- Saletta
- Room 2